

BRIEF COMMUNICATION

ON THE STATUS OF SOME NEMATODE SPECIES FROM AUSTRALIAN BIRDS

Identification of nematodes from Australian birds, now in progress, has shown that the following nomenclatural changes and comments are necessary.

Comment on *Anisakis diomedae* (Linstow)¹ (Ascaridoidea: Anisakidae): *A. diomedae* was collected from *Diomedea brachyura* in the north Pacific Ocean by the Challenger Expedition. The Challenger material was examined by Baylis² and identified as belonging to the genus *Anisakis* Dujardin, 1845. Since then this species has been placed in *Contracaecum* Railliet and Henry, 1912, by several authors^{3,4,5}, in *Anisakis*⁶, and in *Anisakis*, syn *Stomachus*⁷.

The most obvious differences between *Anisakis* spp. and *Contracaecum* spp. are the absence of interlabia and of intestinal and oesophageal appendices in *Anisakis*. In *A. diomedae* interlabia and oesophageal and intestinal appendages are absent. There is however a thick ribbon-like excretory canal, one of the features noted by Hartwich⁸ as characteristic of the Anisakinae. This is particularly large in *A. diomedae* and may have been mistaken by some authors (as it was by Johnston, pers. comm. c. 1940) for an intestinal caecum. Johnston and Mawson⁷ give description and figures of the species.

Anisakis is said to occur only in marine mammals^{8,9}. This note is to draw attention to the identity of the species and to the later accounts of Baylis and Johnston & Mawson. It is probable that these are the only authors quoted here who have examined specimens of *A. diomedae*. Further work may lead to the erection of a new genus for the species, but it cannot be considered as belonging to *Contracaecum*.

A. diomedae is very commonly found in albatrosses and petrels from the oceans around Australia.

Proposed nomenclatural changes:

In Heterakoidae: Heterakidae:

Heterakis bancrofti (Johnston)¹⁰ to *Odonterakis bancrofti*. *Odonterakis*¹¹ was erected for Heterakinae in which the spicules are equal and non-alate and in which labial grooves are present. It is distinguished from *Heterakis* by these features and by the presence of three small interlabia. All these features are present in the type material of *H. bancrofti* and in other material from the same host species, so the nomenclatural change is necessary.

Odonterakis spp. have up to the present been recorded only from South American birds, mainly tinamous. The Australian records are mostly from the Brush Turkey, *Alectura lathami*, though there is one record from a Wonga Pigeon, *Leucosarcia melanoleuca*.

In Acuarioidae: Acuariidae:

Acuaria corvicola Johnston and Mawson¹², to *A. anthuris* (Rud.)¹³. The appearance and measurements of the single female worm on which the description of *Acuaria corvicola* was based are close to those of the numerous specimens of *A. anthuris* now known from *Corvus* spp. from many parts of Australia^{14,15} and the species are considered synonymous.

Echinuria querquedulae Johnston and Mawson¹⁶, to *E. uncinata* (Rud.)¹³. *E. querquedulae*, described from a single female from *Anas gibberifrons*, was differentiated from *E. uncinata* mainly by the size of the body spines. It is now considered that this falls within the natural variation in size of spines seen in *E. uncinata* identified from the same and related hosts in Australia¹⁵. Thus *E. querquedulae* becomes a synonym of *E. uncinata*.

¹Linstow, O. von. (1888). Rep. Voyage H.M.S. Challenger 1873-1876 23, 1-18.

²Baylis, H. A. (1923). Parasitology 15, 1-13.

³Johnston, T. H. (1938). Rep. Aust. Antaret. Exped. (1911-1914) Ser. C, 10, 1-31.

⁴Yamaguti, S. (1961). Systema Helminthum, Vol. III, Pt. 1. New York. 680 pp.

⁵Davey, J. T. (1971). J. Helminth. 45, 51-72.

⁶Yorke, W. & Maplestone, P. A. The nematode parasites of vertebrates. London. 536 pp.

⁷Johnston, T. H. & Mawson, P. M. (1945). Rep. Brit. Aust. N.Z. Antaret. Exped. Series B. 5(2), 73-160.

⁸Baylis, H. A. (1920). Parasitology 12, 253-264.

⁹Hartwich, G. (1974). In C.I.H. Keys to the Nematode parasites of vertebrates. No. 2. R. C. Anderson, A. G. Chabaud, and S. Willmott, Eds. Commonw. Agric. Bur., Farnham Royal, England. 15 pp.

¹⁰Johnstone, T. H. (1912). J. and Proc. R. Soc. N.S.W. 26, 84-122.

¹¹Skrjabin, K. I. & Schikhobalova, N. V. (1947). Dokl. Akad. Nauk, S.S.S.R. 18, 719-721.

¹²Johnston, T. H. & Mawson, P. M. (1941). Rec. Aust. Mus. 21, 9-16.

¹³Rudolphi, C. A. (1819). Entozoorum synopsis cui accedunt mantissa duplex et indices locupletissimi. Berlin. 811 pp.

- ¹⁴**Mawson, P. M.** (1972). Trans. R. Soc. S. Aust. 96, 139-147.
- ¹⁵**Mawson, P. M., Angel, L. M. & Edmonds, S. J.** unpublished.
- ¹⁶**Johnston, T. H. & Mawson, P. M.** (1942). Trans. R. Soc. S. Aust. 66, 60-70.

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